

Amendments to the Claims

Please amend the claims as indicated below.

1. (canceled)
2. (currently amended) The apparatus of claim [[1]] 7, wherein the at least one isolator is disposed to provide isolation from the induced vibrations in at least one predetermined direction.
3. (currently amended) The apparatus of claim [[1]] 7 further comprising an electronics package disposed in the housing and wherein the at least one sensor form at least a portion of the electronics package.
4. (Original) The apparatus of claim 2, wherein the at least one predetermined direction further comprises directions along three translational axes and three angular axes.
5. (canceled)
6. (canceled)
7. (currently amended) ~~The apparatus of claim 1~~ An apparatus for sensing seismic waves in the earth, the apparatus comprising:
 - (a) a housing;
 - (b) one or more seismic sensors disposed in the housing; and
 - (c) at least one isolator coupled to the one or more seismic sensors for isolating the one or more seismic sensors from high-g shock induced in the housing, the high-g shock being a shock of one g or more, wherein the at least one isolator further comprises a first layer of silicone rubber and a second layer

of polyurethane foam.

8. (currently amended) The apparatus of claim [[1]] 7 further comprising a block as an inertial mass operatively associated with the one or more sensors.
9. (currently amended) The apparatus of claim [[1]] 7, wherein the one or more sensors are accelerometers.
10. (Original) The apparatus of claim 9, wherein the one or more accelerometer sensors are three accelerometers disposed to provide three orthogonal axes of sensitivity.
11. (Original) The apparatus of claim 9, wherein the one or more accelerometers are MEMS accelerometers.
12. (currently amended) The apparatus of claim [[1]] 7 further comprising a cap coupled to the housing, the cap having a feedthrough for providing conductor access to the one or more seismic sensors.
13. (Original) The apparatus of claim 12, wherein the cap and housing are coupled to form a sealed sensor module.
14. (Original) The apparatus of claim 13, wherein the sealed sensor module is hermetically sealed.
15. (canceled)
16. (currently amended) The seismic sensor module of claim [[15]] 22, wherein the module case is adapted to provide a compressive force on the at least one isolator.
17. (currently amended) The seismic sensor module of claim [[15]] 22, wherein the at least one seismic sensor is a MEMS accelerometer.
18. (currently amended) The seismic sensor module of claim [[15]] 22, wherein the at least one isolator is disposed to provide isolation from the induced vibrations in at least one

predetermined direction.

19. (Original) The sensor module of claim 18, wherein the at least one predetermined direction further comprises directions along three translational axes and three angular axes.

20. (canceled)

21. (canceled)

22. (currently amended) ~~The sensor module of claim 15~~ A seismic sensor module tolerant to high-g shock inputs, the high-g shock inputs being inputs of one g or more, the seismic sensor module comprising:

(a) a module case;

(b) a sensor assembly housed by the module case, wherein the sensor assembly includes an inertial mass and at least one seismic sensor coupled to the inertial mass; and

(c) at least one isolator coupled to the sensor assembly and the module case,

wherein the at least one isolator further comprises a first layer of silicone rubber and a second layer of polyurethane foam.

23. (Original) The sensor module of claim 17, wherein the at least one MEMS accelerometer further comprises three MEMS accelerometers disposed to provide three orthogonal axes of sensitivity.

24. (currently amended) The seismic sensor module of claim ~~[[15]]~~ 22 further comprising a cap coupled to the module case, the cap having a feedthrough for providing conductor access to the one or more seismic sensors.

25. (Original) The sensor module of claim 24, wherein the cap and module case are

sealed.

26. (Original) The sensor module of claim 25, wherein the sealed sensor module is hermetically sealed.

Claims 27-35 are canceled.

36. (currently amended) The sensor module of claim ~~[[35]]~~ 41, wherein the predetermined level is 1g.

37. (currently amended) The sensor module of claim ~~[[35]]~~ 41, wherein the at least one isolator is disposed to provide isolation from the induced vibrations in at least one predetermined direction.

38. (Original) The sensor module of claim 37, wherein the at least one predetermined direction further comprises directions along three translational axes and three angular axes.

39. (canceled)

40. (canceled)

41. (currently amended) ~~The sensor module of claim 35~~ A sensor module tolerant to high-g shock inputs, the high-g shock inputs being inputs of one g or more, the sensor module comprising:

- (a) a module case;
- (b) a sensor assembly within the module case, the sensor assembly having an inertial mass coupled to the module case and to one or more seismic sensors coupled to the inertial mass; and
- (c) an isolation layer coupled to the module case and to the sensor assembly, wherein the sensor assembly does not move relative to the module case

when an input force of less than a predetermined level is applied to the module case, wherein the at least one isolator further comprises a layer of silicone rubber and a layer of polyurethane foam.

42. (currently amended) The sensor module of claim ~~[[35]]~~ 41, wherein the one or more sensors are accelerometers.

43. (currently amended) The sensor module of claim ~~[[35]]~~ 41, wherein the one or more sensors are three accelerometers disposed to provide three orthogonal axes of sensitivity.

44. (currently amended) The sensor module of claim ~~[[35]]~~ 41, wherein the one or more sensors are MEMS accelerometers.

45. (currently amended) The sensor module of claim ~~[[35]]~~ 41 further comprising a cap coupled to the module case, the cap having a feedthrough for providing conductor access to the one or more seismic sensors.

46. (Original) The sensor module of claim 45, wherein the cap and module case are sealed.

47. (Original) The sensor module of claim 46, wherein the sealed sensor module is hermetically sealed.

48. (canceled)

49. (currently amended) The method of claim ~~[[48]]~~ 54 further comprising coupling an inertial mass to the one or more seismic sensors.

50. (currently amended) The method of claim ~~[[48]]~~ 54, wherein the at least one isolator is disposed to provide isolation from the induced vibrations in at least one predetermined direction.

51. (Original) The method of claim 50, wherein the at least one predetermined direction

further comprises directions along three translational axes and three angular axes.

52. (canceled)

53. (canceled)

54. (currently amended) ~~The method of claim 48~~ A method of isolating one or more seismic sensor in a seismic sensor module from high-g shock loads while maintaining sensitivity to seismic waves the high-g shock loads being shock loads of one g or more, the method comprising:

- (a) providing a housing for the seismic sensor assembly;
- (b) installing one or more seismic sensors in the housing;
- (c) providing at least one isolator between the one or more sensors and the housing, wherein providing the at least one isolator further comprises providing a layer of silicone rubber and a layer of polyurethane foam.

55. (currently amended) The method of claim ~~[[48]]~~ 54 further comprising reducing noise during operation of the sensor module using an inertial mass coupled to the one or more sensors.

56. (currently amended) The method of claim ~~[[48]]~~ 54, wherein the one or more sensors are accelerometers.

57. (currently amended) The method of claim ~~[[48]]~~ 54, wherein the one or more sensors are three accelerometers disposed to provide three orthogonal axes of sensitivity.

58. (currently amended) The method of claim ~~[[48]]~~ 54, wherein the one or more sensors are MEMS accelerometers.

59. (currently amended) The method of claim ~~[[48]]~~ 54, wherein the sensor assembly further comprises a cap coupled to the housing, the cap having a feedthrough for providing

conductor access to the one or more seismic sensors, the method further comprising sealing the cap and housing to form a sealed sensor module.

60. (Original) The method of claim 59, wherein the sealed sensor module is hermetically sealed.

61. (canceled)

62. (canceled)